We Claim:

1. A heat-resistant filter layer, comprising:

a material being at least partially pervious to a fluid;

at least one filter section incorporating said material; and

at least one boundary region extending from said filter section, said boundary region having a first layer thickness being different than a second layer thickness of said filter section.

2. The heat-resistant filter layer according to claim 1, wherein said first layer thickness is less than said second layer thickness.

3. The heat-resistant filter layer according to claim 1, wherein said boundary region, starting from an edge of the filter layer, has a boundary width of at most 30 mm.

4. The heat-resistant filter layer according to claim 1, wherein said filter section has at least one fiber layer formed of said material and said fiber layer has a fiber layer thickness of at most 3 mm.

5. The heat-resistant filter layer according to claim 4, further comprising at least one metal layer delimiting the filter layer on an outside and has a metal-layer thickness of at most 0.05 mm.

6. The heat-resistant filter layer according to claim 1, further comprising a sandwich structure containing at least one fiber layer formed of said material and at least one metal layer.

7. The heat-resistant filter layer according to claim 1, wherein said first layer thickness is less than 60% of said second layer thickness.

8. The heat-resistant filter layer according to claim 1, wherein said first layer thickness is less than 50% of said second layer thickness.

9. The heat-resistant filter layer according to claim 1, wherein said first layer thickness is less than 35% of said second layer thickness.

10. The heat-resistant filter layer according to claim 1, wherein said boundary region, starting from an edge of the filter layer, has a boundary width of at most 20 mm.

11. The heat-resistant filter layer according to claim 1, wherein said boundary region, starting from an edge of the filter layer, has a boundary width of at most 10 mm.

12. The heat-resistant filter layer according to claim 1, wherein said boundary region, starting from an edge of the filter layer, has a boundary width of at most 5 mm.

13. The heat-resistant filter layer according to claim 1, wherein said filter section has at least one fiber layer formed of said material and said fiber layer has a fiber layer thickness of at most 1 mm.

14. The heat-resistant filter layer according to claim 1, wherein said filter section has at least one fiber layer formed of said material and said fiber layer has a fiber layer thickness of at most .5 mm.

15. The heat-resistant filter layer according to claim 4, further comprising at least one metal layer delimiting the filter layer on an outside and has a metal-layer thickness of at most 0.03 mm.

16. The heat-resistant filter layer according to claim 4, further comprising at least one metal layer delimiting the

filter layer on an outside and has a metal-layer thickness of at most 0.015 mm.

17. A filter body for purifying exhaust gases from an internal combustion engine, the filter body comprising:

at least partially structured layers being at least one of stacked and wound to form passages through which the exhaust gases can flow, said layers including at least one heat-resistant filter layer, said heat-resistant filter layer comprising:

a material being at least partially pervious to a fluid;

at least one filter section incorporating said material; and

at least one boundary region extending from said filter section, said boundary region having a first layer thickness being different than a second layer thickness of said filter section.

18. The filter body according to claim 17, wherein said layers include at least one structured sheet-metal foil and said filter layer being a substantially smooth filter layer,

said layers connected to one another by brazing or welding, in at least one connecting section.

19. The filter body according to claim 18, wherein said connecting section is disposed in said boundary region of said filter layer.

20. The filter body according to claim 18, further comprising means (17, 18, 19, 20, 21, 23) for compensating for differences in the first and second layer thicknesses of said filter layer.

21. The filter body according to claim 20, wherein said first layer thickness of said boundary region is less than said second layer thickness, said boundary region having a deformation region which at least partially overlaps itself and is brazened together.

22. The filter body according to claim 20, wherein said first layer thickness of said boundary region is less than said second layer thickness, said structured sheet-metal foil has a zone disposed adjacent to said boundary region and a remaining zone, said zone of said structured sheet-metal foil has a greater height than a remaining zone of said structured sheet-metal foil.

23. The filter body according to claim 22, wherein said zone of said structured sheet-metal foil has structures with a structure height being greater than structures of said structured sheet-metal foil in said remaining zone, a material thickness of said structured sheet-metal foil being equal in said zone and said remaining zone.

24. The filter body according to claim 17, further comprising at least one additional compensation layer disposed adjacent to said boundary region of said filter layer.

25. A process for producing a filter body, which comprises the steps of:

producing at least one heat-resistant filter layer;

forming, in the filter layer, at least one boundary region, the boundary region having a reduced layer thickness in comparison to remaining parts of the filter layer;

providing means for compensating for different layer thicknesses of the filter layer;

stacking and/or winding the filter layer and at least one structured sheet-metal foil to form a honeycomb body having passages formed therein through which an exhaust gas can flow;

supplying a brazing material in at least one connecting section between the filter layer and the structured sheet-metal foil; and

heating the honeycomb body to form brazing joints in the connecting section.

26. The process according to claim 25, which further comprises:

introducing the honeycomb body into a casing before the brazing material is supplied, and while the brazing material is being supplied, disposing the casing in at least one attachment region for attaching at least one of the filter layer and the structured sheet-metal foil to the casing, so that brazing joints are generated during heating in the attachment region.

27. The process according to claim 25, which further comprises:

forming the boundary region having the reduced layer thickness by applying a compressive force to the filter layer in the boundary region.

28. The process according to claim 27, which further comprises producing the means for compensating by deforming the boundary region.

29. The process according to claim 25, which further comprises producing the means for compensating by disposing at least one compensation layer between the filter layer and the structured sheet-metal foil.